



IRIS OFFERS YOU THE BEST TECHNICAL SPECIFICATIONS, MAKING IT A  
COMPELLING CHOICE FOR YOUR RESEARCH.

BORN FROM A PASSION TO REVEAL THE UNSEEN, IRIS IS AN  
INNOVATIVE INSTRUMENT FOR YOUR NEXT SCIENTIFIC EXPLORATION.

GAIN CONFIDENCE IN YOUR RESULTS,  
PUSH THE BOUNDARIES OF YOUR PROTEIN DETECTION.

*Make It Visible*

*Uvitec Cambridge*

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Ask for a demo

Please be aware that the technical specifications of all our UVITEC products might change depending on your country. Moreover UVITEC systems may be used in a wide range of imaging applications for research use only. No license under any third-party patent is conveyed with the purchase or transfer of this product. No right under any other patent claim, no right to perform any patented method, and no right to perform commercial services of any kind, including without limitation, reporting the results of purchaser's activities for a fee or other commercial consideration, is conveyed expressly, by implication, or by estoppel. Therefore, users of all our UVITEC products should seek legal advice to determine whether they require a license under one or more of the existing patents in their country. This system is not intended for sale or transfer in the United States.



**IRIS**

MAKE IT VISIBLE



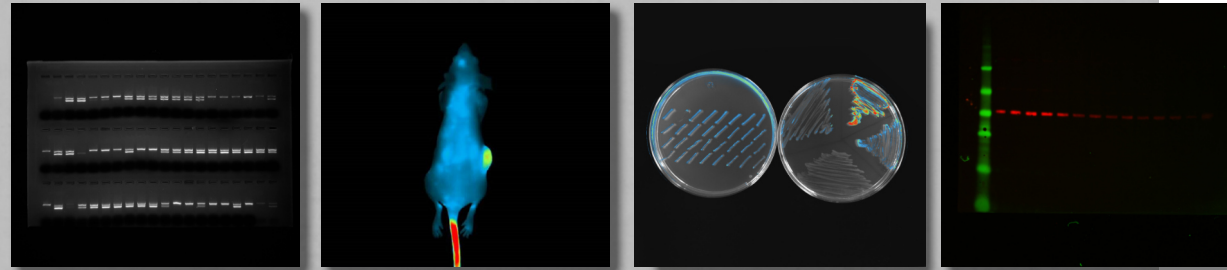
*"Nothing in life is to be feared, it is only to  
be understood."*

Marie Curie (1867-1934)



In honor of Rosalind Franklin  
and the many women in science.





# ALLIANCE IRIS

## I . Innovative

Revolutionary UV-LED Table

## R . Reliable

Chromascan concept  
for uniform illumination

## I . Intuitive

Fully automatic analysis

## S . Sensitive

Wider lens aperture  
for unrivalled sensitivity

In 1953, at the heart of Cambridge University, James Watson and Francis Crick discovered the DNA double helix structure based on Rosalind Franklin famous "Photograph 51".

This breakthrough not only unveiled the secrets of genetic information; it also brought certainty on the very essence of life itself.

Today, following in the footsteps of these great scientists, we are committed to provide you certainty by guaranteeing quality images with IRIS.

The new Alliance IRIS is the latest generation top end imaging system on the market for chemiluminescence and fluorescence Western blots. IRIS not only presents the highest optic sensitivity with an aperture of  $f/0.75$  but also strong innovative features for unmatched precision and detection.



UVITEC was born in Cambridge and inspired by the future. With years of lab experience, our product design team are very familiar with researchers daily workflows. Today, practical and user-oriented design are always at the core of our developments.

**Red is the new black**

The standalone design of IRIS is a testament to its practicality and user-friendliness. It is easy to clean and compact to fit seamlessly into your laboratory environment. Inspired by the red square in our logo and the distinctive shape of the DNA molecule, its design connects IRIS to the very essence of molecular research, symbolizing the pursuit of knowledge and discovery.

**Get the Cambridge Touch**

Enjoy the comfort of the widest touch screen. With its impressive size of over 15.6 inches (40 centimeters), our touchscreen offers an immersive and smooth viewing experience. The screen is also adjustable, with a remarkable resolution to ensure that every detail of your molecular imaging experiment is vividly displayed.

**Avoid time consuming manipulation**

Our mobile sample tray has been designed to avoid time-consuming manipulations ensuring that you can handle your samples with ease. Additionally, our Alliance IRIS imager features a full door aperture and slide-out tables, specifically engineered to provide complete access to darkroom.



**Don't miss the next UV-LED Tables generation**

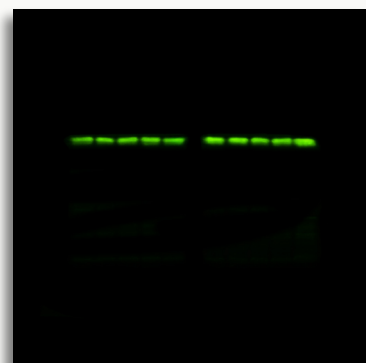
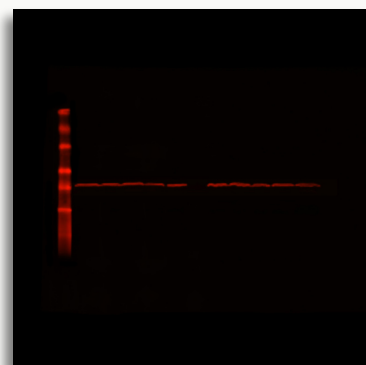
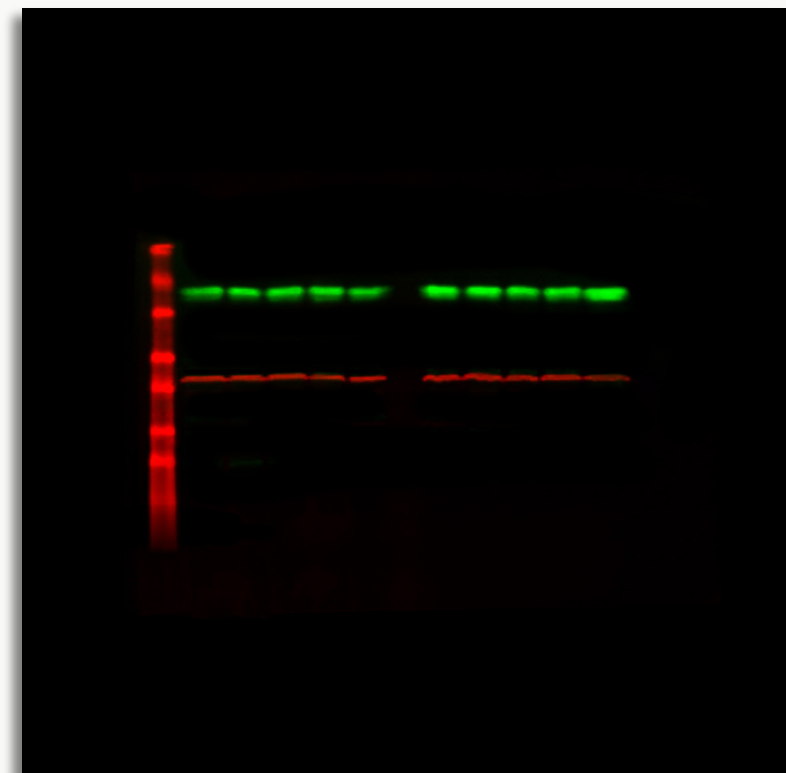
In the spirit of a sustainable environment, UVITEC Cambridge is the first to introduce a UV-LED technology to ensure a smooth transition from our traditional UV tables. UV-LEDs have a longer lifespan: they can operate for thousands of hours without significantly losing light intensity and efficiency. In addition, these LED conditions prevent damage to your most sensitive samples.



UV-LED Table

IRIS IS  
INNOVATIVE





# IRIS IS RELIABLE

*Epifluorescence users seek consistent and uniform illumination in their applications.*

## A brief history of excitation light sources

Traditional imagers that you will find on the market often rely on the following illumination modes.

### White light:

The very first epifluorescent imaging systems started by using white light-based technology, a process that involves converting white light into red, green and blue via large band filters. Its limitation lies in multiplexing as it becomes impossible due to the light intensity being divided by three.

### Spot LED:

The next generation and most commonly found epifluorescence imaging systems use Spot LED technology. However, NIR/IR excitation channels originate from the same excitation source, decreasing significantly the light intensity in these channels. Depending on the manufacturer, filter quality varies, influencing crosstalk and multiplexing capacities.

### Scanner:

More recently, the introduction of laser-based technology raised interest towards near-infrared and infrared applications. Despite its benefits, this technology

remains expensive, requires long acquisition time, and is limited to 2 channels of excitation.

## Find the right light source

Our well-known illumination system overcomes these challenges, providing strong light and multiplexing possibilities. Our unique Chromascan concept goes beyond, offering the best of our technologies.

## Discover the next generation illumination

Through our new technology, IRIS offers more accurate quantification, and fewer crosstalk issues. The acquisition time is rapid. IRIS leaves no room for uncertainty by guaranteeing that your samples are scanned in the same way, everywhere.

## Upgrade your system at anytime

IRIS is fully customizable, tailored to your workflow, and upgradable. At UVITEC, to fit the various numbers of epifluorescent dyes that may be used in a laboratory, we have designed 12 different packs including excitation and emission modules for you to easily insert into your system at any time you decide to start working on epifluorescence.

## Choose a trusted companion

In line with our top-end commitment and quality-oriented values, IRIS is made of stainless steel and recycled components.

# IRIS IS INTUITIVE

*IRIS' software transforms molecular imaging into a seamless experience, by delivering fast and accurate results across your entire workflow .*

## Get your images in one click

Auto is our motto. Enjoy our 1-click acquisition process with fully automatic exposure, lighting and focus mode. Our software allows you to get outstanding quantifiable images and perfect detection. Each picture is automatically saved into a built-in gallery to make sure your data is secure and easily accessible. Predefined application protocols streamline your routine experiments, while custom protocols can be created to match your unique workflows.

## Enjoy seamless navigation

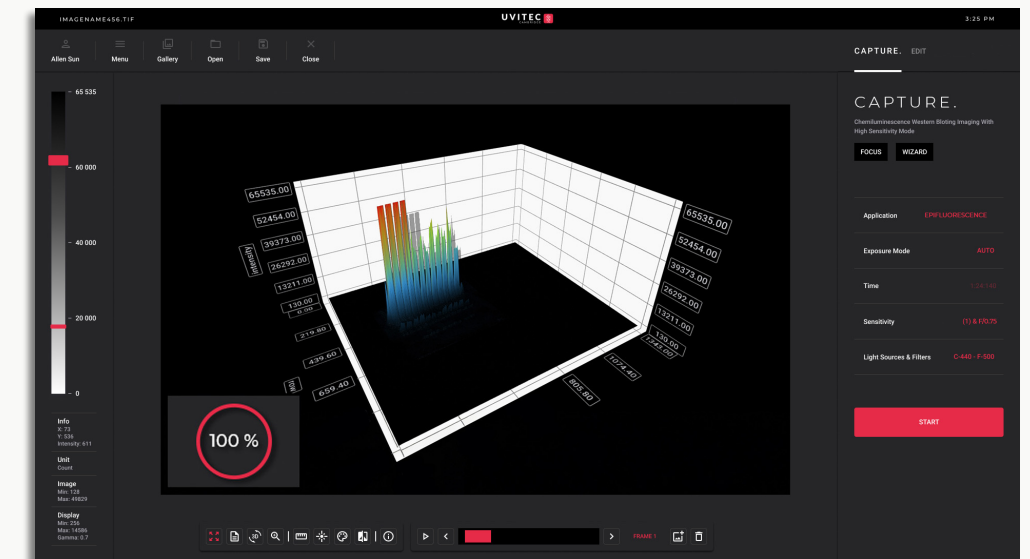
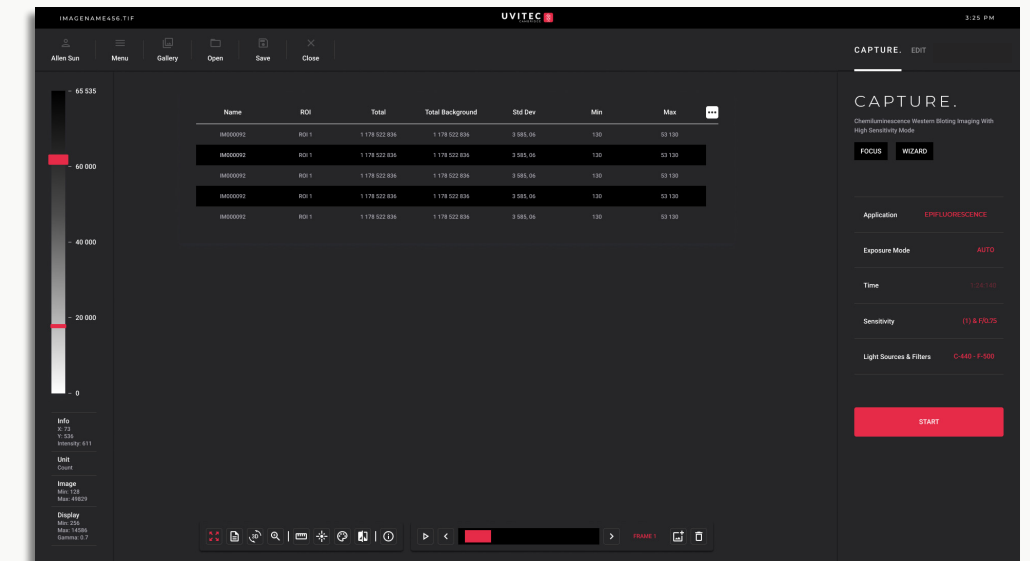
Designed for efficiency, IRIS features a responsive interface in which menu navigation itself reflects our wish to save you unnecessary steps. Exiting a tool is as simple as clicking outside its window. Real-time interactivity adds another layer of innovation: click directly on a region of interest on your image to instantly display the signal intensity at that precise location.

## Experience effortless data analysis

IRIS integrates an unprecedented technology in the world of molecular imaging. As soon as your Western blot is captured, our new software sets up your data as never seen before - dramatically reducing the time needed for manual adjustments and allowing you to go straight to analysis. IRIS serves as a faithful assistant, automating routine tasks while preserving the integrity of your raw data.

## Reveal every pixel of information

IRIS' analysis package offers powerful tools for molecular weight determination, protein quantification, and distance calculation. Greyscale visualization is enhanced with adaptable display controls, including histogram views and a representation of the percentage of shades of grey captured (up to 65,535 grey levels).







# IRIS IS SENSITIVE

*Just as the human iris opens a window to the world, our IRIS imager opens a portal to a molecular universe where your protein of interest is revealed in unprecedented detail. Combining all the parameters presented below, IRIS guarantees sensitivity.*

## Collect more light

IRIS has its eyes wide open: its lens features an impressive f/0.75 aperture, which allows it to capture an incredible amount of light. In optics, the smaller the focal number, the more light your device collects.

## Get the best quantifiable pictures

IRIS provides a remarkable resolution of up to 30 megapixels (9.2MP native), which ensures that you can discern even the finest details in your imaging experiments. In addition, our system provides pictures with high density of grayscale within the camera, enabling you to precisely analyze your samples. The closer you

get to 65,535 grey levels, the more quantifiable information you have access to.

## Detect even the weakest signals

IRIS' optical system is further enhanced by its exceptional dynamic range, with an optical density (OD) of 4.8. This means that IRIS can capture a wide range of signal intensities without losing crucial information. Whether you are working with faint signals or intense ones, IRIS can accommodate your needs with ease.

## Keep it cool

To maintain its sensitivity, IRIS relies on a sophisticated cooling system, using a three-stage Peltier normalized camera. This cooling system allows you to minimize background noise and detect your lowest signals.

## • Practicality

**1-click to image** > effortless acquisition, in no time  
**Full automation** > hands-off, automated routines  
**Interchangeable Tables** > hassle-free sample positioning  
**Innovative software** > revolutionized acquisition and analysis

## • Detection capabilities

**Chromascan concept** > homogeneous fluorescent excitation light  
**Uvipure technology** > enhanced UV for EtBr and all safe stains  
**Confocal discs** > precise signal wavelength capture  
**Multiplexing** > imaging of several proteins

## • Imaging

**Up to 30 megapixels** > 9.2MP native camera resolution  
**f/0.75 custom lens** > unrivalled camera sensitivity  
**3 stages Peltier Cooling** > reduction of background noise  
**OD 4.8 dynamic range** > outstanding detection

## • Design

**Standalone system** > with integrated PC(Windows operating)  
**Comfort** > widest 15.6 inches touchscreen  
**Sustainable UV** > UV LED 312nm  
**Robustness** > stainless steel and epoxy paint

**Dims** > Height: 672 mm - Width: 442 mm - Depth 544 mm - **Weight** > 70 Kg - **FOV** > 20 x 24 cm

### ▶ Chemiluminescence

Western blotting

### ▶ Fluorescence

DNA and RNA gels with fluorescent stains

### ▶ Epi Fluorescence

(Optional) Selection of NIR / RGB modules from 12 combinations available

### ▶ Bioluminescence

In-vivo Luciferase and Fluorescence

### ▶ Visible Imaging

(Optional) Colorimetry and Protein gels

# THEY TRUST US

More than 10.000  
users worldwide

